Wargaming for the future

Connections 2008

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Wargaming

- **Bad definition:** Any type of modeling, including exercises, campaign analysis, computer simulation without players (CSWP)

- **My (revised) definition**

   A warfare model or simulation in which the flow of events shapes, and is shaped by, decisions made by a human player or players during the course of those events

. . . and players are people

Definition: analysis

- Analysis is

  A scientific method of providing decision makers with a quantitative basis for decisions—Morse and Kimball, *Methods of Operations Research*

- Key words
  - Scientific
  - Quantitative

Wargaming is NOT analysis

- Key words for analysis
  - Scientific
  - Quantitative
- *Key words for wargaming*
  - *Players*
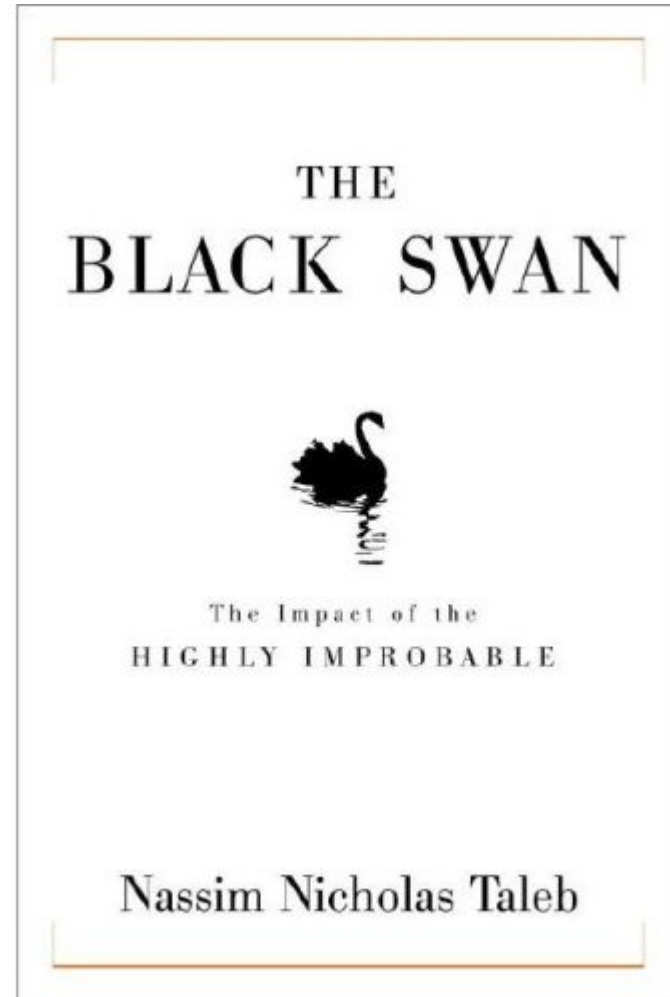 - *Decisions*

Wargaming is not . . .

- Analysis
- Real
- Duplicable
- Universally applicable

But it may be our best hope

- . . . to prepare for "Black Swans"
- Before they bite us!

THE
BLACK SWAN

The Impact of the
HIGHLY IMPROBABLE

Nassim Nicholas Taleb

Black Swan

- Highly improbable event that is:
  - Unpredictable
  - Carries massive impact
  - Something we tell ourselves stories about after the fact so that we can delude ourselves it was less random and more predictable than it really was
- Absence of evidence is not evidence of absence

Preparation, not prediction

- Surviving—much less profiting from—them requires preparation, not prediction
- Dietrich Dörner, in *The Logic of Failure,* argues that the best preparation may lie in games

Wargame design approaches

- *TThe Analyst* uses data and theory to model the real world, including the players as elements of the model.

- *The Artist* uses data to immerse players in the Artist's story and engage them intellectually and emotionally.

- *The Architect* distills data into a simplified decisionmaking environment that focuses players on key decisions, but lets them live out their own storyline, rather than one imposed by the designer's perspective.

The revolution cometh?

- *Analyst* wargames are butting up against their limits in representing GWOT and asymmetric warfare
- 21st Century wargaming in DoD needs revolutionary new directions from the design approaches of *Artists* and *Architects*